

Lawrence Livermore National Security Cost Model Functional Management Assessment

J. Tevis, J. Hirahara, B. Thomas, M. Mendez

June 17, 2008

Disclaimer

This document was prepared as an account of work sponsored by an agency of the United States government. Neither the United States government nor Lawrence Livermore National Security, LLC, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or Lawrence Livermore National Security, LLC. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or Lawrence Livermore National Security, LLC, and shall not be used for advertising or product endorsement purposes.

This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

Lawrence Livermore National Security Cost Model Functional Management Assessment

Assessment Document Number XXX-XXX

Dates

The Functional Management Assessment of the CFO Processes was performed at the Laboratory on April 23 and 24, 2008

Team Composition

The assessment team was comprised of the following individuals:

Jim Tevis, Financial Manager, Bechtel Systems and Infrastructure, Inc.

Jim Hirahara Executive Director for Business and Finance/Laboratory Management, University of California Office of the President

Brian Thomas

Washington Group International Business Services Manager, Waste Treatment Plant Washington Division of URS Corporation

Committee oversight was provided by:

Maureen Mendez CFO and Business Services Manager Bechtel National Inc.,

Scope

The scope of the Functional Management Assessment of the cost model included a review of the plan and progress of the Cost Model Review Team. The review focused on processes in place to ensure simplicity, compliance with cost accounting standards and indirect cost allocation methodology, and the change management plan. This was intended to be a high-level initial review in order to provide recommendations for a subsequent more comprehensive review.

Persons Contacted

The following people were interviewed, either individually or in a group setting:

Kathy Baker	Bob Bills
Don Boyd	Ron Butters
Rachelle Jeppson	Chris Lundell
Frank Russo	Pam Smith
	Don Boyd Rachelle Jeppson

Key Documents Reviewed

The single document reviewed by the team during the assessment was the Indirect Cost Recovery Model Review, which describes how the indirect rate restructure and new organizational structure have resulted in streamlined charging practices to better understand and strategically manage costs.

Identification of Issues Resulting from the FMA Review

ISSUE 1: The cost model focuses heavily on rate structure but not on cost management.

DISCUSSION:

Significant progress has been made to simplify the rate structure. The number of indirect rates has been reduced from 67 different indirect rates used under the prior contract to 32 rates in the first year of the LLNS contract, with a goal of further reduction to 16 for FY09. The reductions are being recommended by a broad-based Working Group driven by Lab leadership desiring a simplified rate structure that would make it easier to analyze the true cost of overhead, be viewed as equitable, and ensure appropriate use of Service, i.e., operations, Centers. This has been a real challenge due to the significant change in approach from one that previously involved a very complex rate structure. Under this prior approach, the goal was to manage the rates, and rates were established at very detailed levels that would "shine the light" on pools of overhead costs. As long as rates stayed constant or declined, not as much attention tended to be given to them, particularly with so many pools to review (184 indirect rate pools in FY05).

However, as difficult and important as simplifying the rate structure has been, the fundamental reason for the simplification is to make it easier to analyze the true cost of overhead so the costs can be effectively managed. For the current year, the overall the goal of keeping the total cost of an FTE to FY07 levels. This approach reflects the past practice of managing to rates rather than focusing on costs, although streamlined with the more simplified rate structure. Given all the challenges being faced with the contract transition, this was a reasonable interim tactic for dealing with the known cost increases such as fees and taxes. Nonetheless, in order to take full advantage of the opportunities that exist for making sound decisions for further reducing the rates themselves, the Laboratory needs to implement an ongoing and disciplined approach to understanding and managing overhead cost.

RECOMMENDATIONS:

• Develop and implement a structured institutional approach to the collection and review of costs

- Include senior management in a prominent role in the process for review of indirect cost budgets
- Budget based on scope, i.e., justify overhead costs based on priority activities and be sure to identify activities that could be eliminated from the scope of overhead effort for cost savings. This is in contrast to justifying overhead activities based on incremental changes to current costs such as staffing levels.
- Establish appropriate strategically targeted goals and metrics (e.g., composite labor multiplier and direct : indirect ratio)
- o Provide management with meaningful information for decision making using a budget scenario modeling capability ("what ifs")
- Scrub costs for redundant overhead activities or large overhead activities such as \$200M annual facility cost
- As appropriate, encourage the practice of maximizing direct charging of people or activities normally included in overhead accounts

ISSUE 2: The NIF has a significantly different rate structure than other Laboratory work.

DISCUSSION:

Because of its significant size and unique organizational structure as a major construction project, the National Ignition Facility (NIF) has indirect charges that vary from the norm. These variations were reviewed and approved by and disclosed to the NNSA in the Laboratory's past annual Disclosure Statements. In mid-FY 09, NIF will begin transition from a construction line item to an operational center. The reallocation of costs when this occurs could significantly impact the Laboratory's rates and rate structure planning for that transition from a cost- and rate- impact standpoint should begin soon.

RECOMMENDATIONS:

- Evaluate the allocations and cost model on NIF to assess any trends that may be noted as the NIF project winds down, and determine if any preliminary discussions with NNSA regarding potential impacts to the Laboratory's Disclosure Statement would be appropriate.
- Formulate and obtain necessary approvals of a plan and model for transition from a capital cost structure to an operational cost structure.
- Evaluate the resultant impact to other programs.

ISSUE 3: The new rate model must be finalized shortly in order to implement the model beginning in FY 09.

DISCUSSION:

As noted in Issue #1, a Working Group has developed a simplified rate structure for the Lab to use for FY09. The Working Group has evaluated the cost impacts of the simplified rate structure at the major program level and identified a disparate impact in the Safeguards and Security area where a substantial increase in overhead cost allocation may need to be mitigated. The simplified rate structure will need to be approved by the Laboratory Director and issued within the Laboratory to formulate detailed budgets so that operations using the new rates can proceed beginning October 1, 2008. A number of activities should occur over the coming weeks and months to ensure a smooth implementation.

RECOMMENDATION:

• Consider modeling the impact of the proposed simplified rate structure below the major program level in some reasonably scoped manner, possibly a sampling down to the project level, including major Principal Investigator projects. This will provide an opportunity to identify unintended consequences that may have a systemic impact on scientific research projects. Some impacts may be unavoidable, but demonstrating an awareness and consideration of them would enhance the credibility of the new structure, particularly among members of the Working Group whose support has been strong thus far.

OPPORTUNITIES FOR IMPROVEMENT AND MODERNIZATION:

- Engage a future FMA team to evaluate the post-implementation cost model and budgeting process. This should include cost accounting standards and indirect cost allocation methodology compliance, metrics such as labor multiplier rates, and a more comprehensive review of Service Centers.
- A procedure should be developed on the establishment of Service Centers. The procedure should address the minimum value of costs to establish a Service Center. The current Service Centers should be reviewed to determine if the service-benefits-multiple projects across the lab and whether there is de minimums benefit relative to the effort of segregating a Service Center and/or the costs should be included in a larger rate pool such as G&A

NOTEWORTHY ACTIVITIES:

• The Laboratory has demonstrated an ongoing significant effort to streamline the rate model, with broad-based participation from all programs and functions. The CFO organization has been working since FY-05 to reduce the number of indirect rates and significant progress has been made. The Cost Model Review Team is made up of representatives from a broad cross-section of the Laboratory and based on our discussions with various team members there is broad based support for the streamlining effort.

- There is strong support from Business and Operations Directorate personnel to change from level of effort to more robust work scope and deliverables driven budgeting and earned value management techniques. There is a strong understanding among the Business and Operations Directorate personnel whom we interviewed of the need and value of moving to a budgeting and work execution model that is based on defined scope and deliverables. In view of the current Laboratory downsizing, clearly defining work scope will allow for prioritization of work based on available budget.
- There has been an integration of effort to evaluate the Laboratory's current structure and activities by indirect and direct operations. The "FRED" team made up of the Principal Associate Director for Business & Operations and Principal Associate Director for NIF & Photon Science are evaluating the current Laboratory structure and driving an understanding of the need to operate differently based on the leaner budgets of the future.